

23. (Once Amended) The method of claim 22, further comprising:
identifying a destination of the communication;
determining a group identifier assigned to the destination; and
if the group identifier assigned to the destination and the group identifier assigned to the source are different, sending the communication out a client port not within the first plurality of ports.

SUM F² 25. (Once Amended) The method of claim 21, wherein the bridge includes a client port not within the first plurality of ports, the method comprising:
receiving the multicast packet on the client port;
identifying a group identifier within the multicast packet; and
sending the multicast packet out on those ports having the same group identifier as the group identifier within the received multicast packet.

SUM F⁴ 30. (Once Amended) A method of operating a network bridge having a first plurality of ports through which network communications pass to and from the bridge, the method comprising:
assigning a group identifier to each port of the plurality of ports, wherein all ports with a same assigned group identifier are in a same group;
receiving a communication on a first port of the bridge;
sending the communication out of the bridge on all other ports of the bridge having the same assigned group identifier as the first port;
identifying a source of the communication received on the first port of the bridge;
maintaining an association of the identified source with the assigned group identifier of the first port;
identifying a destination of the communication;
determining a group identifier assigned to the destination; and
if the group identifier assigned to the destination and the group identifier assigned to the source are different, sending the communication out a client port not within the first plurality of

ports and indicating the group identifier assigned to the first port within the communication sent out the client port.

SUB F⁵ 32. (Once Amended) A method of operating a network bridge having a first plurality of ports through which network communications pass to and from the bridge, the method comprising:

5 assigning a group identifier to each port of the plurality of ports, wherein all ports with a same assigned group identifier are in a same group;

D connecting a router to a client port of the bridge not within the first plurality of ports;

identifying the ports on the router connected to the network bridge;

defining, on the router, a correspondence between the identified ports connected to the network bridge and each distinct group identifier;

receiving a communication on a first port of the bridge;

5 sending the communication out of the bridge on all other ports of the bridge having the same assigned group identifier as the first port;

identifying a source of the communication received on the first port of the bridge;

D maintaining an association of the identified source with the assigned group identifier of the first port;

identifying a destination of the communication;

determining a group identifier assigned to the destination; and

if the group identifier assigned to the destination and the group identifier assigned to the source are different, sending the communication out the client port.

SUB F⁶ 36. (Once Amended) A computer program product for use with a network device having a computer and a first plurality of ports on which network communications pass to and from the network device, wherein the network device includes a client port not within the first plurality of ports, and the computer program product comprises computer program instructions that when executed by the computer direct the computer to perform a method of directing the network communications, the method comprising:

D

assigning a group identifier to each port of the plurality of ports, wherein all ports with a same assigned group identifier are in a same group;

receiving a communication on a first port of the network device;

sending the communication out of the network device on all other ports of the network device having the same assigned group identifier as the first port;

receiving a multicast packet having a multicast destination address on the client port;

identifying a group identifier within the multicast packet; and

sending the multicast packet out on those ports having the same group identifier as the group identifier within the received multicast packet,

wherein the group identifier is removed from the multicast packet before sending the multicast packet out from the network device.

37. (Once Amended) The computer program product of claim 36, wherein the method further comprises:

identifying a source of the communication received on the first port of the network device; and

maintaining an association of the identified source with the assigned group identifier of the first port.

38. (Once Amended) The computer program product of claim 37, wherein the method further comprises:

identifying a destination of the communication;

determining a group identifier assigned to the destination; and

if the group identifier assigned to the destination and a group identifier assigned to the source are different, sending the communication out a client port not within the first plurality of ports.

40. (Once Amended) A computer program product for use with a network device having a computer and a first plurality of ports on which network communications pass to and from the

Claims 21-23 and 25-28 Are In Condition For Allowance

Claim 21 stands rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,937,856 (Natarajan). Applicants respectfully submit that claim 21 as amended is patentable over Natarajan for at least the following reasons.

The Office Action states that claim 24 would be allowable if rewritten in independent form including all the limitations of the base claim (claim 21) and any intervening claims (none). In response to the Office Action, Applicants have amended claim 21 to include all of the limitations of claim 24 as illustrated in the document enclosed herewith titled "Marked-Up Claims." Therefore, claim 21 as amended is allowable.

For at least these reasons, Applicants respectfully submit that claim 21 as amended is not rendered obvious by Natarajan. Accordingly, Applicants respectfully request that the rejection of claim 21 under 35 U.S.C. §103(a) as being unpatentable over Natarajan be withdrawn.

Claims 22, 23, and 25-29, which each depend directly or indirectly from claim 21, are allowable for at least the same reasons as set forth above with respect to claim 21. Accordingly, Applicants respectfully request that the rejections of claims 22, 23, and 27-29 under 35 U.S.C. §103(a) be withdrawn.

Claims 30-31 Are In Condition For Allowance

Claim 30 stands rejected under 35 U.S.C. §112, second paragraph, for lack of clarity. In response to the Office Action, Applicant has amended claim 30 to include all of the limitations of base claim 21 and intervening claims 22 and 23 as illustrated in the document enclosed herewith titled "Marked-Up Claims."

Applicants respectfully submit that claim 30 as amended recites sufficient clarity to satisfy the requirements of §112, second paragraph, and requests that the rejection of claim 30 under §112, second paragraph, be withdrawn.

Claim 31, which depends directly from claim 30 is allowable for at least the same reasons as set forth above with respect to claim 30. Accordingly, Applicants respectfully request that the rejection of claim 31 under §112, second paragraph, be withdrawn.



Claims 32-35 Are In Condition for Allowance

Claim 32 stands rejected under 35 U.S.C. §112, second paragraph, for lack of clarity. Applicants have amended claim 32 to include all limitations of base claim 21 and intervening claims 22 and 23 as illustrated in the document enclosed herewith titled "Marked-Up Claims."

Applicants respectfully submit that claim 32 as amended satisfies the requirements of §112, second paragraph, and request that the rejection of claim 32 under §112, second paragraph, be withdrawn.

Claims 33-35, which depend directly from claim 32, are allowable for at least the same reasons as set forth above with respect to claim 32. Accordingly, Applicants respectfully request that the rejection of claims 33-35 under §112, second paragraph, be withdrawn.

Claims 36-38 Are In Condition for Allowance

Claim 36 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Natarajan. Applicants respectfully submit that claim 36 as amended is not rendered obvious by Natarajan for at least the following reasons.

Claim 39 as filed was not rejected based on any prior art. By this amendment, Applicants' amend claim 36 to include all of the limitations of claim 39 and for clarification as illustrated in the "Marked-Up Claims" document. Because it now includes all of the limitations of originally filed claim 39, Applicants respectfully submit that claim 36 is patentable over Natarajan, and request that the rejection of claim 36 under 35 U.S.C. §103 as being unpatentable over Natarajan be withdrawn.

Claims 37 and 38, which each depend directly and indirectly from independent claim 36, are patentable over the art of record for at least the same reasons as set forth with respect to claim 36. Accordingly, Applicants respectfully request that the rejection of claims 37 and 38 under §103(a) be withdrawn.

Further, claim 39 as filed stood rejected under 37 C.F.R. §1.75(c) for failing to further limit the subject matter of claim 36. Applicants respectfully submit that claim 36 as amended to include all of the limitations of claim 39 and for clarification satisfies 37 C.F.R. §1.75(c) and request that this rejection be withdrawn.



Claims 37 and 38 also stand rejected under 37 C.F.R. §1.75(c) for failing to further limit the subject matter of claim 36. By this amendment, claim 37 and 38 have been amended as illustrated in the "Marked-Up Claims" document. Applicants respectfully submit that claim 37 and 38 as amended satisfy the requirements of 37 C.F.R. §1.75(c) and request that the rejection of these claims under 1.75(c) be withdrawn.

Claim 40 Is In Condition For Allowance.

Claim 40 stands objected to under 37 C.F.R. §1.75(c) for failing to further limit the subject matter of previous claims 36-38. Claim 40 also stands rejected under 35 U.S.C. §112, second paragraph, for lack of clarity. Applicants have amended claim 40 for clarification and to include all of the limitations of base claim 36 and intervening claims 37 and 38 as illustrated in the "Marked-Up Claims" document.

Applicants respectfully submit that claim 40 as amended satisfies the requirements of 37 C.F.R. 1.75(c) and 35 U.S.C. §112, second paragraph, and request the rejection of claim 40 on these grounds be withdrawn.

CONCLUSION

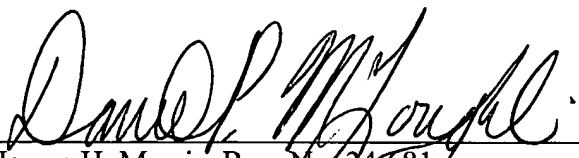
In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

D

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
George Varghese et al, Applicant(s)

By:


James H. Morris, Reg. No. 34,681
Daniel P. McLoughlin, Reg. No. 46,066
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2211
Tel. No.: (617) 720-3500
Attorneys for Applicants

Docket No. E00378.70942/JHM/DPM

Date: April 30, 2002

x04/28/02x

606362-1

D